

[54] **SHIPPING AND DISPLAY CARTON ASSEMBLY FOR AN ELECTRONIC DEVICE**

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[22] Filed: **Jan. 2, 1973**

[21] Appl. No.: **320,219**

[52] **U.S. Cl.**..... **206/45.25, 206/45.14, 206/45.22, 206/523, 206/45.11, 229/16 D, 229/51 TS**

[51] **Int. Cl.**..... **B65d 25/24**

[58] **Field of Search**..... **206/44.12, 44 R, 45.12, 206/45.14, 45.2-45.22, 45.24-45.25, 46 FC, 46 FR, 46 ED, 56 AB, DIG. 36; 229/16 D, 51 TS**

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Primary Examiner—William I. Price

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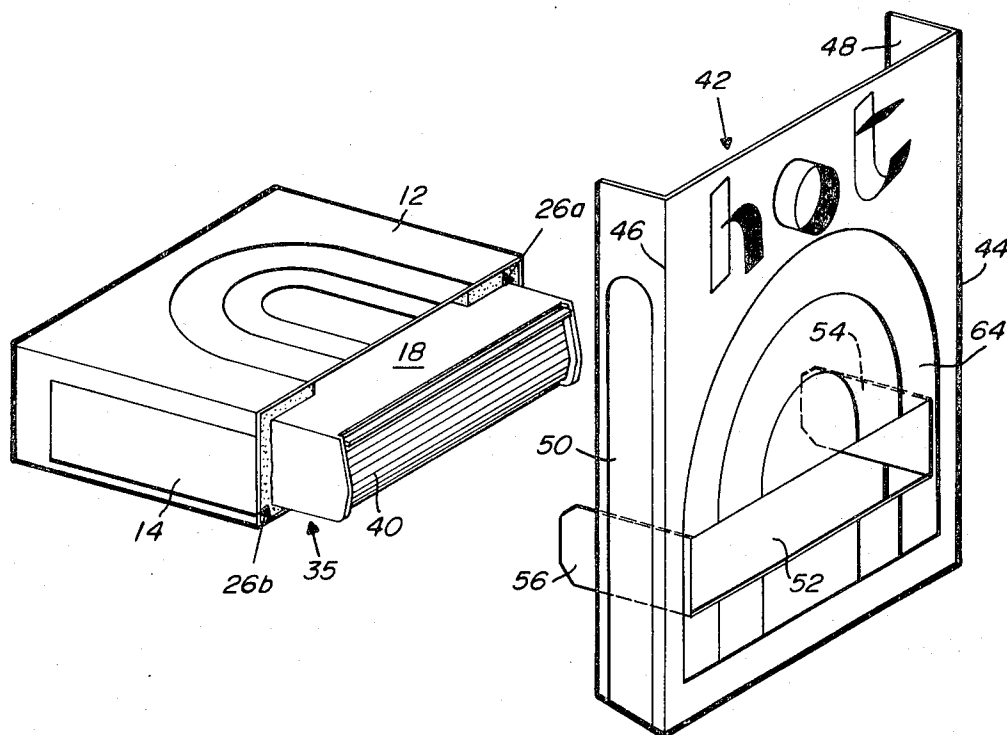
Attorney, Agent, or Firm—Donald J. Lisa; Vincent J. Rauner

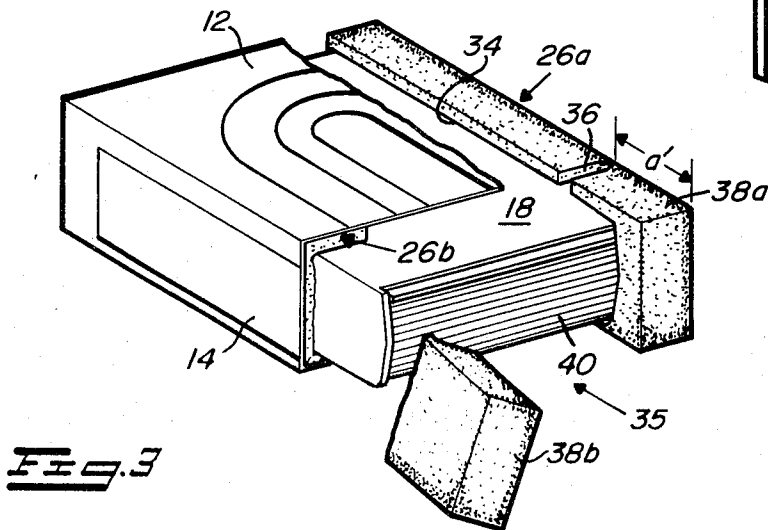
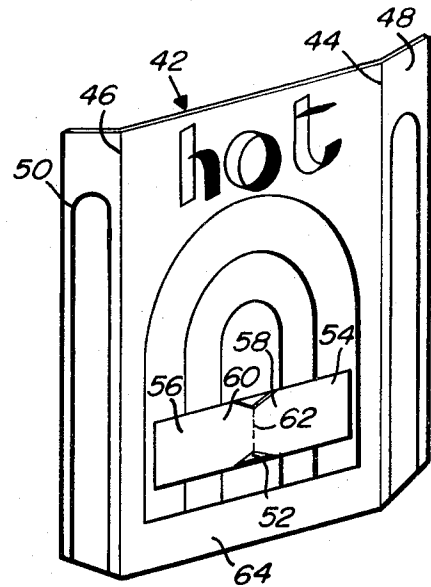
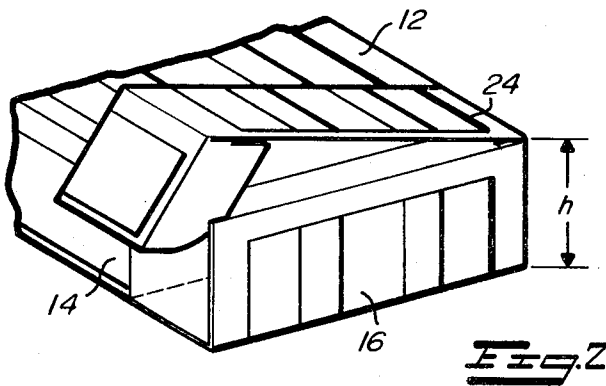
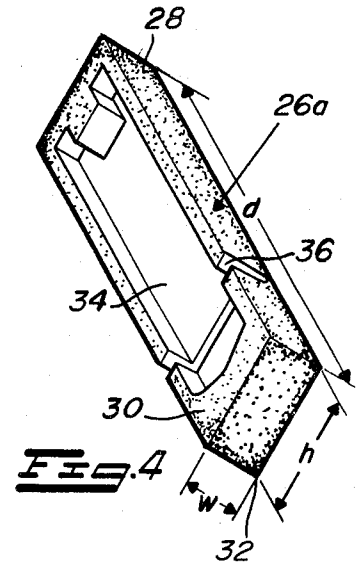
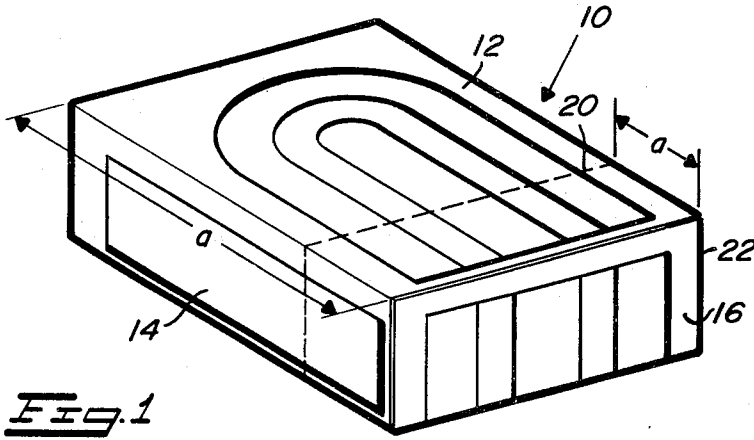
[57]

ABSTRACT

A shipping and display carton assembly for a cartridge tape player includes an outer carton member having a tearaway end portion. A pair of polyfoam carton inserts, between which the tape player is held, is received in the outer carton. Each of the polyfoam carton inserts has a breakaway end portion aligned with the tearaway carton end portion, so that upon removal of both the carton end portion and carton insert end portions, the front end portion of the tape player is exposed. A display card adapted for generally vertical positioning, includes an opening therethrough, dimensioned similarly to and for receipt of the exposed front end portion of the player from the rear surface thereof. Advertising indicia is provided on the front surface of the card. The packaged portion of the tape player and wing portions provided on opposite sides of the card, support the assembly for display. In a preferred embodiment of the display card, a pair of flaps are provided at opposite ends of the opening, which are bendable to extend between corresponding side walls of the tape player and polyfoam carton inserts for added support to the assembly upon insertion of the front end portion of the tape player through the opening.

7 Claims, 7 Drawing Figures





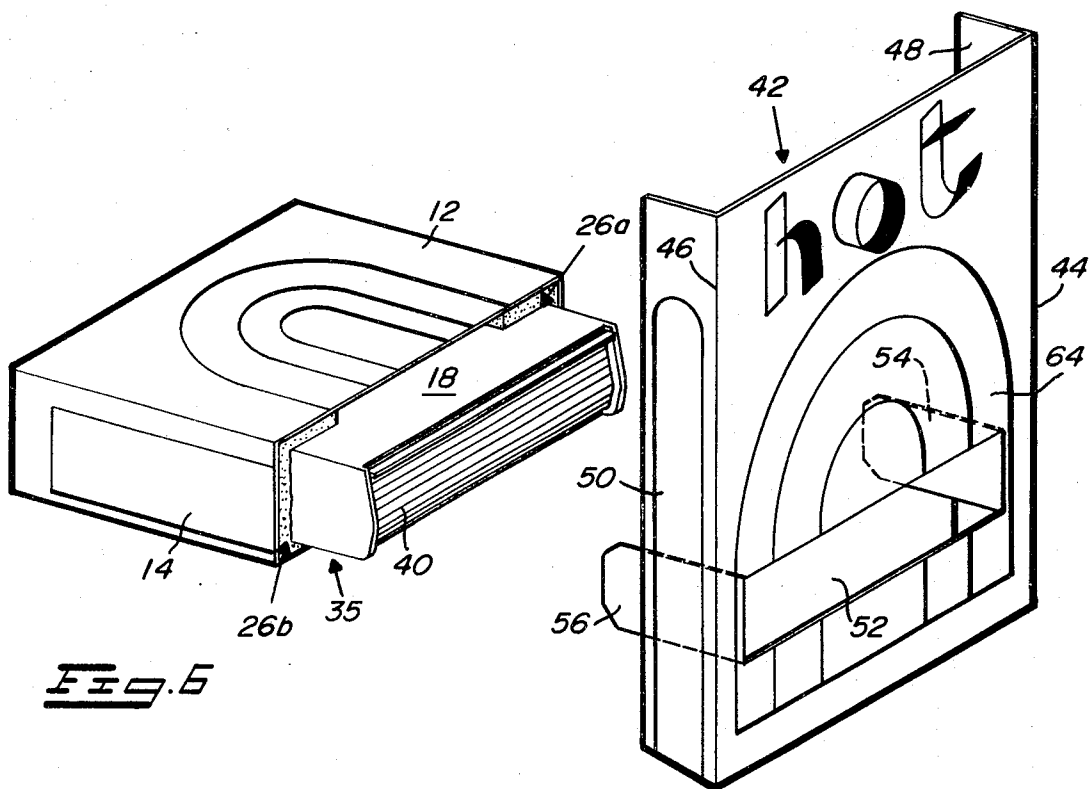


Fig. 6

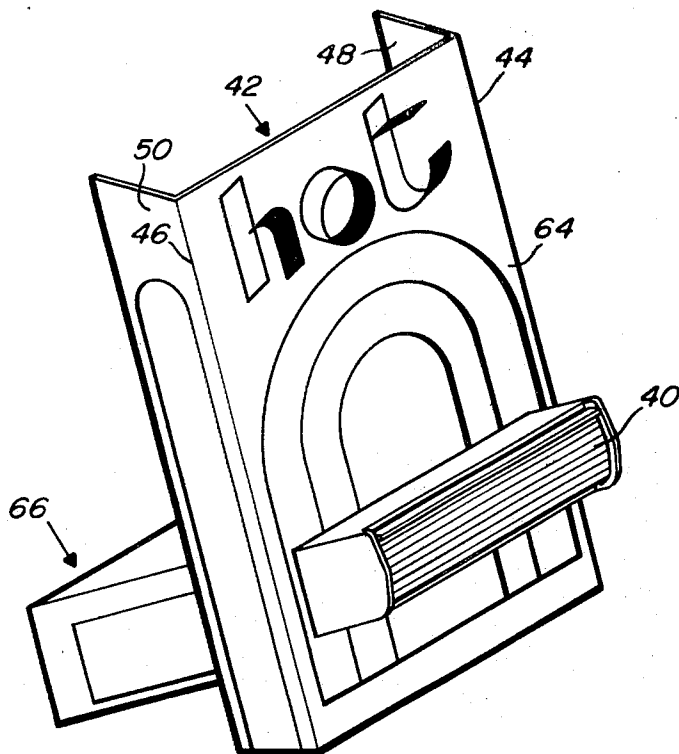


Fig. 7

SHIPPING AND DISPLAY CARTON ASSEMBLY FOR AN ELECTRONIC DEVICE

BACKGROUND

This invention relates generally to the packaging of electronic devices such as, for example, cartridge type tape players, and more particularly to shipping carton and the like assemblies for such goods which can be adapted for displaying the goods without complete removal of the latter therefrom.

Conventionally, when a dealer wishes to display an electronic or the like device, such as, for example, a cartridge tape player, he must completely remove the player from the shipping carton in which it was originally packaged, thus subjecting the device to undue handling by the public and possible damage thereto.

In many instances, if an item is displayed without protection, it becomes unsalable and the cost thereof must be absorbed by the dealer.

SUMMARY

Accordingly, it is a primary object of the present invention to provide a new and improved shipping and display carton assembly for an appliance or the like which is adapted to permit visual display of the appliance without fully removing the protective carton therefrom.

It is another object of the present invention to provide a shipping and display carton assembly of the above described type, which affords adequate protection to an appliance, etc., shipped therein, yet is easily converted for displaying the item.

Briefly, a preferred embodiment of the shipping and display carton assembly according to the invention includes a chipboard or the like carton of standard design. The carton is perforated at the top, bottom and side walls thereof, along a line located a predetermined distance from a first end of the carton. A polyfoam or the like insert is received in the carton and is partially sectioned or scored at an end thereof corresponding to the perforated end of the outer carton. The scored line of the polyfoam insert is aligned with the line of perforations in the carton.

A cartridge tape player or the like device is packaged within the polyfoam insert and received within the carton, with the front cartridge receiving and control portion being positioned at the removable ends thereof.

To display the tape player or the like device, the first end of the carton is removed by tearing along the perforations. Thereafter, the end of the polyfoam insert which has been exposed is broken away along the scored line to expose the front of the tape player.

A printed counter of display card forming a third element of the display carton assembly, is also provided. The card includes a pair of die-cut wings, which are bendable at substantially right angles with respect to the center portion of the card, to facilitate standing. The exposed portion of the tape player is inserted from the rear of the card through an aperture provided therein, which is dimensioned similarly to the front of the tape player, whereby the player is displayed at the front of the card without removal completely from the carton; the electronics, etc., of the player remaining packaged but unseen at the rear of the display card.

DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a perspective view of the outer carton member of the shipping and display carton assembly according to the invention;

FIG. 2 is a fragmentary perspective view of the carton of FIG. 1 illustrating the removal of a first end portion thereof in preparation for display of the electronic device to be packaged therein, according to the invention;

FIG. 3 is a fragmentary perspective view of the carton of FIG. 1 shown subsequent to the removal of the first end portion, and illustrating the carton insert members in which the electronic device is initially received when being packaged;

FIG. 4 is a perspective view of one of the carton insert members;

FIG. 5 is a perspective view of a printed display card member of the shipping and display carton assembly according to the invention;

FIG. 6 is a perspective view of the shipping and display carton assembly shown prior to arranging the components for display; and

FIG. 7 is a perspective view of the assembly of FIG. 6 shown in an assembled condition.

DETAILED DESCRIPTION

Referring now to the drawings in greater detail wherein like numerals have been used throughout the various views to designate similar components, there is shown in FIGS. 1, 4 and 5 the three elements or components, respectively, of the shipping and display carton assembly according to the invention. In FIG. 1 there is shown the outer carton 10 of the assembly which includes top, bottom and side walls, respectively, (only top wall 12 and side wall 14 being shown in the figures) and end flaps such as 16, for enclosing an electronic device or appliance, such as a cartridge tape player 18, therein. The outer carton 10 is fabricated of cardboard, shipboard or the like material and is perforated along a line 20 extending about the carton at the top, bottom and side walls thereof, a predetermined distance from one end 22 of the carton. The perforations permit easy and accurate removal of an end portion 24 (FIG. 2) of the outer carton when preparing the assembly for display.

Received in carton 10, are carton insert means, herein taking the form of polyfoam or styrofoam, as it is well known in the art, members 26a, 26b. Each of the members includes top, bottom, side and end walls, only the top wall 28, one side wall 30 and one end wall 32, of which is shown in the figures. The members are each dimensioned similarly in height h and depth d to the outer carton for receipt therein (See FIGS. 1 and 4). The width w of each of the members is considerably less than the width of the carton.

Each of the members includes a cavity, such as 34 (FIG. 4) formed therein. The outer dimensions of each of the cavities are complementary to the side dimensions of the electronic tape player device 18, so that a side portion of the latter is receivable in the cavity with little or no movement permitted therebetween.

Upon inserting the opposite side portions of the cartridge tape player 18 into respective cavities of the carton insert members 26a, 26b, as shown in FIG. 3, a sub-assembly 35 including the device and carton insert

members is formed which is receivable in outer carton 10. The sub-assembly 35 is dimensioned similarly to the internal dimensions of the outer carton for easy insertion therein and withdrawal therefrom.

Each of the carton insert members 26a, 26b, is prescored or precut at a predetermined location 36 along top, side and bottom walls thereof. The distance *a* between the prescored line 36 and end wall 32 of each of the members is substantially the same as distance *a* between the line of perforations 20 and end flap 16 of the outer carton (See FIGS. 1 and 4). Thus, when it is desired to display the electronic device, without fully removing the device from the protection of the outer carton, both end portion 24 of the outer carton and end portions 38a, 38b, of the carton insert members, may be removed, as shown in FIG. 3, to expose the front portion 40 of the tape player. The remaining portion of the player remains packaged and protected.

The third element of the shipping carton and display assembly according to the invention includes a display card 42, (See FIGS. 5-7). The display card is formed from a preferably rectangular sheet of heavy cardboard or the like material and is prefolded along lines 44, 46 thereof near opposite sides of the card to provide wings 48, 50, which as will be described hereinafter, aid in supporting the display card assembly. An aperture 52 is formed at a predetermined location in the display card. The aperture is dimensioned complementarily to the dimension of the exposed portion 40 of the electronic device packaged in the carton assembly.

A pair of flaps 54, 56 extend toward each other to cover the aperture 52 in the display card, and the flaps are connected at free ends 58, 60 thereof. Perforations are provided along a line 62 at the connected free ends which permits easy separation of the flaps. The flaps as will be seen hereinafter, are insertable into the carton assembly between the side wall of the electronic tape player device and the polyfoam insert to provide more rigidity and support to the display assembly.

In usage, the tape player 18 is first received at opposite sides thereof in the cavities of carton insert members 26a, 26b, respectively, to form sub-assembly 35. The sub-assembly is inserted into the outer carton 10 through an open end thereof. The end flap, such as 16, covering the open end through which the sub-assembly was received, is thereafter closed to seal the subassembly in the outer carton. When inserting the sub-assembly into the outer carton, it is necessary to align the breakaway end portions 38a, 38b of the polyfoam carton insert members with the tearaway end portion 24 of the outer carton.

Once packaged, the electronic device may be shipped in the carton assembly. Included with the assembly is a display card 42. Thus, when it is desired to display the tape player device, carton end portion 24 is first torn away along perforations 20. Thereafter, the breakaway end portions 38a, 38b, of the carton insert members which are revealed subsequent to the removal of end portion 24, are removed as shown in FIG. 3.

Once the above steps are completed, the display card 42 is made ready by first bending back the wings 48, 50 along folded lines 44, 46, respectively as shown in FIG. 6. Thereafter, the flaps 54, 56 are separated along perforated line 62 to open aperture 52 as shown in FIG. 6. The flaps are folded back toward the exposed portion 40 of the tape player device 18 and away from front

surface 64 of the display card normally carrying advertising indicia, etc.

The exposed portion of the tape player is then inserted through opening 52 from the side of the display card opposite the front surface 64 thereof, with flaps 54, 56 being received between the polyfoam carton insert members and the side walls of the player. The player is pushed through opening 52 until the exposed portion 40 extends fully therethrough and out past the front surface 64 of the display card (See FIG. 7). With the flaps received in the carton assembly as described, greater support is provided thereto.

Subsequent to the insertion of the exposed tape player portion as described, the display assembly is self-supporting, substantially in a vertical position, by the packaged, end portion of the tape player 66 (FIG. 7) and the wings 48, 50 of the display card.

The display may be placed on a sales counter or in a like location, and serves well to permit the public to view the actual tape player or the like device for sale, while maintaining the major portion of the device, including the electronic instrumentalities thereof, protected in the shipping carton materials. The display card serves well also to present sales material to the public relating to the tape player device and to enhance the appearance of the display generally.

While a particular embodiment of the invention has been shown and described, it should be understood that the invention is not limited thereto since many modifications may be made. It is therefore contemplated to cover by the present application any and all such modifications as fall within the true spirit and scope of the appended claims.

We claim:

1. A shipping and display carton assembly for an electronic device, including in combination: an outer carton member having top, bottom and side walls and end flaps, said carton member being perforated at the top, bottom and side walls, along a line located a predetermined distance from a first end of said carton for removing said first end portion thereof, carton insert means being formed to receive said electronic device in surrounding fashion and being sufficiently rigid to protect said electronic device, said carton insert means being dimensioned for receipt within said outer carton member when said electronic device is received in said insert means, one end portion of said insert means being breakable for removal from the remaining portion thereof, said one end portion being substantially equal to the removable first end portion of said carton and being aligned therewith, so that upon removal of said one end portion of said carton member and the corresponding end portion of said insert means, a predetermined portion of said electronic device is exposed for display, the remaining portion of said device being held in said insert means within said outer carton portion, and display card means having an opening therethrough dimensioned for receipt of said exposed portion of said electronic device, said display card means and said packaged portion of said electronic device providing support to said display card means in a generally vertical position when said exposed portion of said electronic device is inserted through the opening.

2. A shipping and display carton assembly as claimed in claim 1 wherein said carton insert means include first and second polyfoam members each having a rectangular box-like shape having a height and depth similar to

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the height and depth of said outer carton for receipt therein, each said polyfoam member having a cavity formed in a predetermined wall thereof, dimensioned for receipt of a correspondingly dimensioned portion of said electronic device, each of said members being scored along a line spaced predeterminedly from one end thereof for breaking said one end portion away from the remaining portion thereof thereby to expose said predetermined portion of said electronic device.

3. A shipping and display carton assembly as claimed in claim 1 wherein said display card means includes a pair of opposing flap members normally extending into said opening, said flap members being bendable to a position substantially perpendicular to said display card means, wherein said first and second carton insert members receive opposite side portions of said electronic device and wherein upon insertion of the exposed portion of said electronic device through said opening in said display card means, each said flap member is received between a corresponding carton insert member and a side portion of said electronic device to secure said display card means to said electronic device for support.

4. A shipping and display carton assembly as claimed in claim 3 wherein said display card means further includes wing members formed at each side thereof, said wing members being bendable to a predetermined angle with respect to the main portion of said card display means to provide additional support to said display assembly.

5. A shipping and display carton assembly for a cartridge tape player including in combination: an outer carton member having top, bottom and side walls and closeable end flaps, a predetermined first end portion of said carton being adapted for easy removal from the remaining portion thereof, carton insert means including a pair of tape player receiving members being dimensioned similarly in height and depth to said outer carton for receipt therein, and being considerably smaller in width than the internal width of said carton, each said member having a cavity formed in a side wall thereof dimensioned similarly to a corresponding outer

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side portion of said tape player for receipt thereof in said cavity to form a sub-assembly, said sub-assembly being dimensioned substantially similar to the internal dimensions of said outer carton for receipt therein, a first end portion of each of said carton insert members being adapted for breaking away from the remaining portion thereof, so that upon removal of said outer carton end portion and said end portions of said carton insert members, a front end portion of said tape player is exposed for display, and a display card including indicia on a first surface thereof and having an opening therein dimensioned for receipt of the exposed portion of said tape player with the packaged portion of the latter being located on the side of the display card opposite said surface including said indicia, said display card and packaged portion of said cartridge tape player providing support to the former for positioning the display card in a generally vertical position with said front portion of the cartridge tape player being held thereby.

6. A shipping and display carton arrangement as claimed in claim 5 wherein said outer carton member is perforated at the top, bottom and side walls along a line located a predetermined distance from a first end of said carton for removing said first end portion thereof, wherein each said carton insert member is scored along a line located a predetermined distance from a first end thereof for easy removal of said end portion and wherein upon insertion of said sub-assembly into said outer carton member said break-away end portions are aligned with said removable end portion of said outer carton member.

7. A shipping and display carton assembly as claimed in claim 6 wherein said display card further includes a pair of flap members extending from opposite ends of said opening and being bendable to a position perpendicular to said display card, each said flap member being received between a corresponding side wall portion of said player and a respective carton insert member upon insertion of said front portion of said player into said opening in said display card, thereby to provide additional support to said assembly.

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 3,848,735
DATED : November 19, 1974
INVENTOR(S) : Paul D. McGee, et al

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 1, line 56, change "of" to --or--.

Column 2, line 41, change "shipboard" to --chipboard--.

Column 2, line 43, second instance, change "a" to
--a [italicized]--.

Signed and sealed this 15th day of July 1975.

(SEAL)
Attest:

RUTH C. MASON
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents
and Trademarks